Listing of Claims

1. (Currently Amended) A method for analyzing an interaction between a sugar chain and a protein that interacts with a sugar chain, wherein the method comprises the steps of:

(a) contacting a fluorescently labeled subject sugar chain or subject glycoconjugate with a glass substrate onto which a protein that interacts with a sugar chain has been immobilized, wherein the glass substrate is coated with a compound comprising an epoxy group as an active group, and wherein a number of reaction vessels are formed on the glass substrate by affixing a rubber having a number of holes on the glass substrate;

(b) measuring the intensity of an excited fluorescence after applying an evanescent wave generated by injecting an excitation light from the edge of the glass substrate, without washing the glass substrate;

(c) digitizing the fluorescence intensity; and

(d) quantifying the fluorescence intensity.

2. (Canceled)

3. (Currently Amended) The method of ~~claim 2~~claim 1, wherein the compound comprising an epoxy group as an active group is 3-glycidoxypropyl trimethoxysilane (GTMS).

4-10. (Canceled)

11. (Previously presented) The method of claim 1, wherein the protein that interacts with a sugar chain is a lectin, an enzymatic protein comprising a sugar-binding domain, a cytokine having an affinity for a sugar chain, or an antibody that interacts with a sugar chain.

12. (Canceled)

13. (Previously presented) The method of claim 1, wherein the glycoconjugate is a glycoprotein, a proteoglycan, or a glycolipid.

14. (Currently Amended) A glass substrate coated with a compound comprising an epoxy group as an active group, onto which a protein that interacts with a sugar chain has been immobilized, and in which ~~one or more~~a number of reaction vessels have been formed by affixing a rubber having ~~one or more~~a number of holes onto ~~a~~the glass.

15. (Original) The substrate of claim 14, wherein the compound comprising an epoxy group as an active group is 3-glycidoxypropyl trimethoxysilane (GTMS).

16. (Canceled)

17. (Previously presented) The substrate of claim 14, wherein the protein that interacts with a sugar chain is a lectin, an enzymatic protein comprising a sugar-binding domain, a cytokine having an affinity for a sugar chain, or an antibody that interacts with a sugar chain.

18-28. (Canceled)

29. (Previously presented) The method of claim 11, wherein the protein that interacts with a sugar chain is a lectin.

30. (Currently Amended) The method of ~~claim 12~~claim 1, wherein the evanescent wave is generated by total internal reflection of the excitation light.

31. (Previously presented) The method of claim 1, further comprising:

comparing the fluorescence intensity with a database of fluorescence intensities of known sugar chains; and

determining the identity of the labeled sugar chain by selecting a sugar chain of known structure having a matching pattern of fluorescence intensity.

32. (Currently Amended) A method for analyzing an interaction between a sugar chain and a protein that interacts with a sugar chain, comprising:

contacting a sample comprising at least one fluorescently labeled glycoprotein with a glass slide comprising one or more lectin conjugated to the glass slide through an epoxy group of 3-glycidoxypropyl trimethoxysilane;

applying an excitation light to the substrate from the edge of the glass substrate without washing the glass substrate;

generating an evanescent wave by total internal reflection of the excitation light; and

measuring intensity of emitted fluorescent light generated by the evanescent wave, wherein an increase in the emitted fluorescent light indicates the interaction between the fluorescently labeled glycoprotein and the lectin.

33. (New) The method of claim 33, wherein the rubber is a black silicon rubber.

34. (New) The glass substrate of claim 14, wherein the rubber is a black silicon rubber.